

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claims 1-9 (cancelled)

Claim 10 (new): A photosensor having a filter function, comprising:
a filter device having a colored glass filter and configured for permitting transmission of light of a predetermined wavelength range including a detection target wavelength range; and

a light receiving device for receiving the light transmitted through the filter device;

wherein said filter device includes a first interference filter structure comprised of a plurality of light transmitting layers stacked on each other, the first interference filter structure being deposited on a face of the colored glass filter;

said light receiving device includes a semiconductor photodetector structure having one or more semiconductor layers, a light receiving area being formed in the one or more semiconductor layers within the semiconductor photodetector structure; and

said one or more semiconductor layers forming the semiconductor photodetector structure contain $\text{In}_x\text{Al}_y\text{Ga}_{1-x-y}\text{N}$ ($0 \leq x \leq 0.21$, $0 \leq y \leq 1$)

Claim 11 (new): The photosensor having a filter function according to claim 10, wherein said filter device further includes a second interference filter structure comprised of a plurality of light transmitting layers stacked on each other, the second interference filter structure being deposited on another face of the colored glass filter opposite to the one face on which said first interference structure is deposited.

Claim 12 (new): The photosensor having a filter function according to claim 10, wherein said interference filter structure contains at least one of SiO_2 and HfO_2 , with an exposed surface of the interference filter structure being formed of the oxide.

Claim 13 (new): The photosensor having a filter function according to claim 10, wherein a longer wavelength end wavelength of said detection target wavelength range corresponding to an absorption end wavelength of said light receiving area is set near a longer wavelength end wavelength of a light transmission wavelength range of said filter device; and a first sensitivity for a predetermined first wavelength included within said detection target wavelength range has a value 10,000 times or more greater than a value of a second sensitivity for a second wavelength which is outside said detection target wavelength range and which is 50 nm longer than said first wavelength.

Claim 14 (new): The photosensor having a filter function according to claim 13, wherein said longer wavelength end wavelength of said detection target wavelength range is $400 \text{ nm} \pm 20 \text{ nm}$.

Claim 15 (new): The photosensor having a filter function according to claim 13, wherein said longer wavelength end wavelength of said detection target wavelength range is $365 \text{ nm} \pm 20 \text{ nm}$.

Claim 16 (new): The photosensor having a filter function according to claim 13, wherein said longer wavelength end wavelength of said detection target wavelength range is $315 \text{ nm} \pm 20 \text{ nm}$.

Claim 17 (new): The photosensor having a filter function according to claim 13, wherein said longer wavelength end wavelength of said detection target wavelength range is $280 \text{ nm} \pm 20 \text{ nm}$.

Claim 18 (new): A flame sensor comprising the photosensor having a filter function according to claim 10, the photosensor being sealed with nitrogen gas or inert gas.

Claim 19 (new): A flame sensor comprising the photosensor having a filter function according to claim 11, the photosensor being sealed with nitrogen gas or inert gas.

Claim 20 (new): A flame sensor comprising the photosensor having a filter function according to claim 12, the photosensor being sealed with nitrogen gas or inert gas.

Claim 21 (new): A flame sensor comprising the photosensor having a filter function according to claim 13, the photosensor being sealed with nitrogen gas or inert gas.

Claim 22 (new): A flame sensor comprising the photosensor having a filter function according to claim 14, the photosensor being sealed with nitrogen gas or inert gas.

Claim 23 (new): A flame sensor comprising the photosensor having a filter function according to claim 15, the photosensor being sealed with nitrogen gas or inert gas.

Claim 24 (new): A flame sensor comprising the photosensor having a filter function according to claim 16, the photosensor being sealed with nitrogen gas or inert gas.

Claim 25 (new): A flame sensor comprising the photosensor having a filter function according to claim 17, the photosensor being sealed with nitrogen gas or inert gas.